

JUnit Basic Testing Exercises

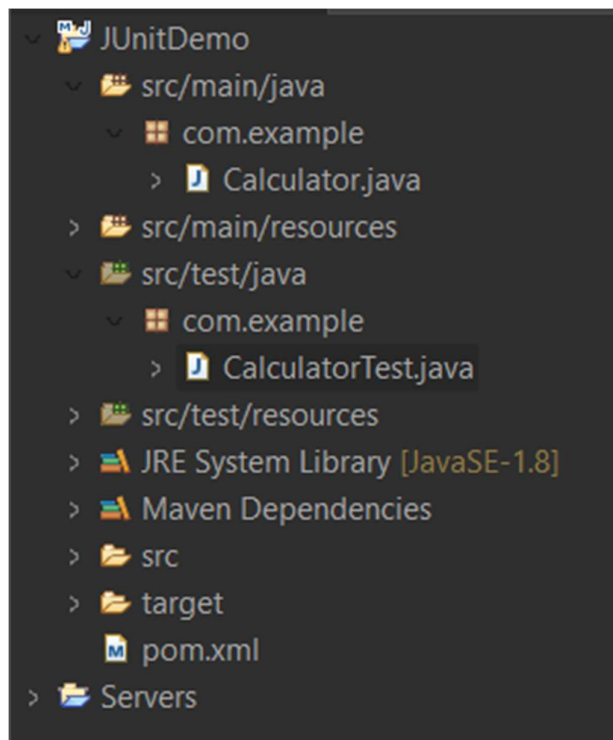
Exercise 1: Setting Up JUnit

Scenario: You need to set up JUnit in your Java project to start writing unit tests.

Steps:

1. Create a new Java project in your IDE (e.g., IntelliJ IDEA, Eclipse).
2. Add JUnit dependency to your project. If you are using Maven, add the following to your pom.xml:
3. Create a new test class in your project.

1. Created a Java project names JUnitDemo in Eclipse
The below one is the Project Explorer of my project



2. As I have used Maven I have added the following dependency to pom.xml of my Maven project

```
https://maven.apache.org/xsd/maven-4.0.0.xsd (xsi:schemaLocation)
1 <project xmlns="http://maven.apache.org/POM/4.0.0"
2   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3   xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
4   <modelVersion>4.0.0</modelVersion>
5   <groupId>com.example</groupId>
6   <artifactId>JUnitDemo</artifactId>
7   <version>0.0.1-SNAPSHOT</version>
8   <dependencies>
9     <dependency>
10       <groupId>junit</groupId>
11       <artifactId>junit</artifactId>
12       <version>4.13.2</version>
13       <scope>test</scope>
14     </dependency>
15 </dependencies>
16
17 </project>
```

I have also created a class called Calculator.java to perform

```
package com.example;

public class Calculator {
    public int add(int a,int b) {
        return a+b;
    }
}
```

3. Next I have added the test class to my project

```
package com.example;

import static org.junit.Assert.*;

public class CalculatorTest {

    @Test
    public void test() {
        Calculator cal=new Calculator();
        int result=cal.add(2, 3);
        assertEquals(5,result);
    }

}
```

And I have runned the test class it has successfully executed without any errors

